

ENVIRONMENTAL QUALITY

CHAPTER 24

RECLAMATION

Sub-Chapter 18

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## Sub-Chapter 18

Rules and Regulations Governing the Montana  
Strip and Underground Mine Siting Act

17.24.1801 DEFINITIONS (1) "Mine site location" means that area of land to be affected by preparatory work.

(2) "Proposed mining area" means that area of land to be affected by all strip mining related activities including the preparatory work area. The area so described shall comprise the total area to be disturbed by the life of the operation as anticipated at the time application is made. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/74; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1802 APPLICABILITY DETERMINATION (1) All non-existing or non-operating mines at the time of passage of Title 82, chapter 4, part 1, MCA, (Strip Mine Siting Act) from which 10,000 cubic yards of mineral or overburden will be removed are subject to the Act.

(2) A person currently engaged in strip mining activities and contemplating an expansion of existing strip mine may, at any time, request that the department, by declaratory ruling, determine whether said contemplated expansion constitutes a new strip mine. The request shall be made in writing and shall include:

(a) topographic map showing the total proposed mining area of the contemplated expansion, as known, and the relationship of the proposed expansion to the existing mine and facilities;

(b) narratives and maps describing soils, wildlife, geologic structure, and vegetation of the proposed expansion. The department may require narratives and maps as described by Title 82, chapter 4, part 1, MCA, rules and regulations pursuant thereto and current departmental guidelines;

(c) total number of acres involved in the proposed expansion;

(d) a brief narrative describing what expansion of facilities or new construction, if any, is contemplated.

(3) The department shall, within 90 days from receipt of a request, including the above required information, notify the person in writing whether the proposed expansion constitutes a new strip mine. The department may not act on a request until sufficient information required by this rule is submitted.

(4) A determination by the department shall not apply, or affect subsequent rulings or determinations if the expansion is not conducted as outlined in the original request. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1803 APPLICATION FOR PERMIT: GENERAL REQUIREMENTS AND PROCEDURES (1) If desired by the applicant, meetings with departmental staff may be arranged prior to formal permit application. Such meetings would provide further information and clarify guidelines to be used in preparing application submittals.

(2) The application shall contain in completed form all of the proposed mining area resource inventories, maps, data, analyses, surveys and other information deemed necessary by the department to determine the acceptability of the proposed mining area under the criteria specified in 82-4-227(2) through (6), MCA. The application shall also contain such resource data, maps, surveys, analyses, and other information as the department deems necessary for a preliminary review of the proposed mining area under the criteria specified in 82-4-227(1) and (5), MCA. If the application is not basically complete regarding the information required to determine acceptability under the criteria specified in this section required at the time of application the department shall notify the applicant within 90 days of receipt of the application and delineate deficient areas. When the department determines the application is basically complete, the 365 day review period established in 82-4-122, MCA, begins on the date the last of the application materials was submitted.

(3) If field inspections or an in-depth review of application materials submitted reveals that supplemental information is necessary, the department shall require such information at any time during the review process. If the necessary supplemental information is not submitted by the applicant in time for adequate departmental consideration and review, the permit shall be denied. If a permit is denied solely on these grounds, an applicant may submit a new application form, reference the supportive information previously submitted and request a waiver of the 365 day review period.

(4) All tests, analyses, or surveys carried out pursuant to these rules and regulations shall be performed or certified by a qualified person. The method and/or procedures used in a given test, analysis or survey shall be documented and described.

(5) An application for a mine site location permit shall be made on forms provided by the department.

(6) Three copies of all applications, maps, reports or other data shall be required. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1804 CONTENTS OF APPLICATION: MAP A current 7.5 minute USGS "topographic" map shall be submitted in all cases where a map depicting surface conditions is required. If a USGS topographic map is unavailable an equivalent will be acceptable. The map or maps submitted shall clearly:

(1) show the location and area of land to be affected during the life of the proposed mining operation with a description of access from the nearest public highway;

(2) identify the area to correspond with the application;

(3) show any adjacent deep mining and the boundaries of surface properties and names of owners of record of the proposed mining area and within 1/2 mile of any part of the proposed mining area;

(4) show the names and locations of all streams, creeks, or other bodies of water, roads, buildings, cemeteries, oil and gas wells, and utility lines on the proposed mining area and within 1,000 feet of such area;

(5) show by appropriate markings the boundaries of the area of land to be affected by the proposed mining operation, any cropline of the seam or deposit of mineral to be mined, and total number of acres involved in the area of land to be affected by the proposed mining operation;

(6) show the date on which the map was prepared and the north point;

(7) show the location of test boring holes;

(8) show the surface location lines of any geologic cross-sections which have been submitted;

(9) be certified as follows: "I, the undersigned, hereby certify that this map is correct, and shows to the best of my knowledge and belief all the information required by the strip mining laws of this state." The certification shall be signed and notarized. The department may reject a map as incomplete if its accuracy is not so attested;

(10) contain such other or further information as the department may require. The department will notify the applicant in writing as to what additional information is required. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1805 CONTENTS OF APPLICATION: COMPLIANCE INFORMATION

Each application shall contain the following information:

(1) the names and addresses of the owners of record of the surface of the area of land to be affected during the life of the proposed mining operation and the owners of record within 1/2 mile of any part of the proposed mining area;

(2) the names and addresses of the present owners of record of all subsurface minerals in the land to be affected during the life of the proposed mining operations;

(3) the source of the applicant's legal right to conduct preparatory work activities on the land affected by the proposed mine site location permit;

(4) the permanent and temporary post office addresses of the applicant;

(5) whether the applicant or any person associated with the applicant holds or has held any other permits, either under this Act or under Title 82, chapter 4, part 1, MCA, and an identification of those permits;

(6) whether the applicant, or any officer, partner, director, or any individual owning of record or beneficially (alone or with associates), 10% or more of any class of stock of the applicant have ever received a notice of violation or non-compliance, or has had a location permit or license, a strip mining license or permit, or a prospecting permit issued by any other state or federal agency suspended, fined and/or revoked, or have ever forfeited a mine site location, or strip mining bond or security in lieu of a bond and if so, a detailed explanation of the facts involved and the penalties assessed in each case must be attached;

(7) the names and addresses of all known contractors or companies who will engage in preparatory work on behalf of the applicant. As additional contractors or companies are engaged they shall be reported in writing to the department within 1 week of employment;

(8) the annual rainfall and the direction and average velocity of the prevailing winds in the area where the applicant has requested a permit;

(9) the name and date of a daily newspaper of general circulation within the county in which the applicant has prominently published an announcement of his application for a mine site location permit, and a detailed description of the land to be affected should a permit be granted;

(10) a recent aerial photograph of the proposed mining area. Such photograph shall be at a scale of 1"=660' or such other size as may be agreed to by the department. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1806 CONTENTS OF APPLICATION: MINERAL AND OVERBURDEN INFORMATION (1) The applicant shall provide to the department information, data, maps, analyses and test logs from the proposed mining area for a preliminary review of mineral and overburden characteristics. Drilling shall be performed at a suitable interval depending on the nature and variability (including chemical, physical, thickness, structure, and hydrologic characteristics) of the overburden and mineral but the interval shall not be less than 1 hole per each 100 acre grid or fraction thereof, unless the department notifies the applicant in writing that fewer holes will be acceptable.

(2) All holes shall be sampled and tested to the bottom of the lowest deposit proposed to be mined. (The applicant should keep in mind the requirements of Title 82, chapter 4, part 2, MCA, and the rules and regulations adopted pursuant thereto, in conducting the drilling program.) (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1807 CONTENTS OF APPLICATION: STUDIES AND INVENTORIES

The applicant shall submit, as a minimum:

(1) overburden analyses capable of meeting the requirements of Title 82, chapter 4, part 2, MCA, pursuant rules and regulations and current departmental guidelines;

(2) mineral analyses capable of meeting the requirements of Title 82, chapter 4, part 2, MCA, pursuant rules and regulations and current departmental guidelines;

(3) two sets of geologic cross-sections accurately depicting the geologic makeup beneath the surface of the proposed mining area. Each set shall depict subsurface conditions at intervals not to exceed 1,500 feet across the surface and shall run at a 90° angle to the other set. Each cross-section shall depict the thickness and geologic character of all strata beginning with the topsoil. After the department has had opportunity to review material, submitted pursuant to (1) and (2) of this rule, and this section, the applicant shall be notified in writing as to whether any additional drilling or testing will be required. If further tests are deemed necessary by the department, the additional testing program shall be clearly outlined in writing to the applicant.

(4) soil surveys and maps capable of meeting the requirements of Title 82, chapter 4, part 2, MCA, pursuant rules and regulations, and current department guidelines;

(5) vegetation surveys and maps capable of meeting the requirements of Title 82, chapter 4, part 2, MCA, pursuant rules and regulations, and current departmental guidelines;

(6) wildlife surveys and maps capable of meeting the requirements of Title 82, chapter 4, part 2, MCA, pursuant rules and regulations and current departmental guidelines;

(7) hydrology studies and maps capable of meeting the requirements of Title 82, chapter 4, part 2, MCA, pursuant rules and regulations, and current department guidelines;

(8) a listing, location and description of the archaeological, historical, ethnological and cultural values of the area of land to be affected by the proposed mining operation. When possible, such values shall be located and identified on accompanying maps. Published research or other information must be submitted or referenced;

(9) a comprehensive listing, location and description of scenic and/or geological formation or sites. Panoramic photographs may be used to show such formations or sites;

(10) a description of effect the proposed mining area operation will have on adjacent or surrounding lands. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-112, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1808 CONTENTS OF APPLICATION: BLASTING INFORMATION

(1) The applicant shall provide to the department a detailed narrative of proposed blasting methods that will be performed in conjunction with the proposed mining area operation. The applicant shall detail all other phases of the proposed operation that may have deleterious effects on a dwelling house, public building, school, church, cemetery, commercial or institutional building, public road, stream, lake, or other public property. Procedures employed to mitigate adverse effects shall be described. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)



17.24.1809 CONTENTS OF APPLICATION: MINING AND RECLAMATION PLANS The applicant shall also provide to the department a general mining and reclamation plan for the proposed mining operation. These plans shall, as a minimum, include the following topical discussions:

- (1) a mining plan, including:
    - (a) direction of mining;
    - (b) estimated acreage to be disturbed yearly;
    - (c) estimated average depth of overburden;
    - (d) length and width of proposed cuts;
    - (e) estimated production (tons/yr.);
    - (f) a narrative discussion showing that any deleted areas will be given appropriate consideration;
    - (g) such other or further information as the department may require;
  - (2) a reclamation plan, including:
    - (a) proposed reclaimed use;
    - (b) direction of final drainage;
    - (c) elimination of final highwall;
    - (d) estimated acres reclaimed yearly;
    - (e) further information as the department may require.
- (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1810 CONTENTS OF APPLICATION: MINE SITE LOCATION INFORMATION (1) The preparatory work site and proposed facilities shall be described in narrative form and located on the mine site permit map. The narrative shall categorize each disturbance as to specific purpose, disturbance method, acreage, and depths and volumes of cuts or fills. The operator shall be obligated to conduct the method of construction and reclamation in accordance with the provisions of the plans unless proposed changes requested by the company are authorized in writing by the department. The department may make changes in the construction and reclamation plans when problem situations are revealed by field inspection or as other relevant information is obtained. Upon request, all parties shall have an opportunity for a hearing, in accord with 82-4-130, MCA, prior to any modification of a permit or reclamation plan. As additional information and/or maps are obtained by the company for the intended area of operations such information shall be promptly submitted to the department. This rule does not repeal or otherwise modify the duty of an operator to annually apply for a new permit and/or the renewal of an existing permit. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

Rules 17.24.1811 through 17.24.1814 reserved

17.24.1815 PERFORMANCE STANDARDS The operator shall:

(1) bury under adequate fill all toxic materials, shale, mineral, or other material determined by the department to be acid producing, toxic, undesirable or creating a hazard. Burial depth should be selected to prevent contact with ground water or infiltrating waters that will subsequently pollute the ground water in the area;

(2) seal off, as directed by the department, any break-through of water creating a hazard;

(3) impound, drain or treat all runoff water so as to reduce soil erosion, damage to grazing and agricultural lands, and pollution of surface and subsurface waters;

(4) remove or bury all metal, lumber, and other refuse resulting from the operation;

(5) use explosives in connection with the operation only in accordance with department specifications as found in the rules pursuant to Title 82, chapter 4, part 2, MCA, designed to minimize noise, surface damage to adjacent lands and water pollution, ensure public safety, and for other purposes;

(6) not throw, dump, pile or permit the dumping, piling, or throwing or otherwise placing of any stones, rocks, earth, soil, dirt, debris, trees, wood, logs or any other materials or substances of any kind or nature beyond or outside of the area of land which is under permit and for which a bond has been posted under 82-4-123, MCA, or place the materials described in this section in such a way that normal erosion or slides brought about by natural physical causes will permit the materials to go beyond or outside of the area of land which is under permit and for which a bond has been posted under 82-4-123, MCA;

(7) identify the location of a proposed road(s) and/or railroad loops(s), spur(s) or extension(s) on the site by prominent markings prior to the time the proposed preparatory work is inspected and prior to the commencement of construction. No such construction shall proceed along dry coulees and intermittent drainageways unless the operator takes necessary precautions to insure that no off-site sedimentation will result;

(8) construct drainage ditches on both sides of the through-cut, and the inside shoulder of a cut-fill section, with ditch relief cross-drains being spaced according to grade. Water shall be intercepted before reaching a switchback or large fill and shall be drained off or released below the fill. Drainage structures shall be constructed in order to cross a stream channel, and shall not affect the flow or sediment load of the stream;

(9) stabilize and revegetate at the first seasonal opportunity all cut and fill slopes resulting from construction of an access road, a railroad loop or a haulageway road outside of the area to be mined;

(10) not surface roads, railroad loops, spurs or extensions with refuse coal, acid producing or toxic material or with any material which will produce a concentration of suspended solids in surface drainage;

(11) employ all appropriate methods to prevent loss of haulage or access road surface material in the form of dust;

(12) condition the seed and take adequate measures to prevent erosion by means of culverts, water bars, or other devices upon the abandonment of any road, railroad loop, spur or extension. Such areas shall be abandoned in accordance with all provisions of Title 82, chapter 4, part 2, MCA, and the rules adopted pursuant thereto. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1816 RECLAMATION PLAN: ADDITIONAL SPECIFIC REQUIREMENTS The applicant shall submit construction and reclamation plans for all intended preparatory work. Such plans shall be capable of meeting all applicable requirements which would be included in an application for permit under Title 82, chapter 4, part 2, MCA. Such plans shall include:

(1) a map showing proposed locations of railroad loops, spurs or extensive waste and refuse areas, coal handling facilities, office and maintenance buildings, all roads, dragline erection sites and other related disturbances;

(2) the estimated depths of all cuts or excavations and fills needed for on-site construction;

(3) overall dimensions for coal handling facilities, office or maintenance buildings and railroad loops insofar as disturbance is concerned;

(4) photographic transects of the proposed mine facility area. Photographic points and direction shall be located on an accompanying map. Estimated depths of proposed cuts and fills shall be identified on each photograph containing areas where cuts and/or fills are anticipated;

(5) a detailed plan, including timetables, showing the method and manner of reclaiming all disturbances related to preparatory work. Such plans shall include a description of the method and manner of reclaiming land affected by construction of railroad loops, office and maintenance areas, coal handling facilities and other disturbances associated with such preparatory work;

(6) an estimate of water usage expected to result from preparatory work activities, as well as a detailed narrative of planned procurement for such water. This narrative shall document that the water rights of other landowners will not be adversely affected;

(7) further information as the department may require. The department will notify the applicant in writing as to what

additional information is required. (History: 82-4-111, 82-4-112, MCA; IMP, 82-4-122, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1817 WATER QUALITY: OTHER LAWS, NONDEGRADATION

(1) Waters within the public domain of the state that possess a quality higher than established standards shall be maintained at their present high quality consistent with the powers granted to the board.

(2) All operators shall comply with all applicable water quality standards established under Montana law and the rules adopted pursuant thereto. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1818 WATER QUALITY: IMPOUNDMENT

(1) Treatment facilities in sufficient size and number consisting of but not limited to collection basins, water retarding structures and siltation dams shall be constructed with prior approval of the department. All such facilities shall be constructed at or above the points of discharge into receiving streams for the purpose of treating acid or toxic water and for the settling of sediment prior to discharge into the receiving stream. As part of an application for permit, an operator shall submit the design specifications, drawings, method of operation and control, and quality of discharge of the treatment facilities. The operator shall indicate on the maps submitted as part of an application for permit the proposed location of all treatment facilities. Proposed reclamation of treatment facilities shall be included in the reclamation plan. Additional treatment facilities may be required by the department after commencement of the operation if conditions so indicate a need.

(2) All approved and constructed treatment facilities shall be maintained in proper working order by the operator and operated so that they will perform as proposed in the application for permit. All treatment facilities constructed and approved pursuant to the provisions of this rule shall be monitored by the operator to assure continuous satisfactory performance until approved reclamation has been accomplished.

(3) Permanent water impoundments shall not be allowed unless approved by the department. If the department determines at any time that the proposed impoundment area will not fill to the expected levels, meet acceptable water quality standards or any other relevant criteria, the impoundment area shall be regraded and surface drainage facilitated.

(4) No water quality treatment of approved lakes or ponds shall be permitted without department approval.

(5) Monthly monitoring reports, where applicable, shall be submitted to the department including the number of operating

days, the gallons of drainage treated, a log of the tests made in accordance with ARM 17.24.1819, and a description of any operating problems and the corrective action taken. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1819 WATER QUALITY: TREATMENT (1) The operator shall by the treatment of all water leaving the mine site location prevent the drainage into the waters of the state drainage from any source, the pH of which is less than 6.0 or greater than 9.0, or which contains a concentration of iron in excess of 7 milligrams per liter (mg/l). The discharge must register positive net alkalinity (total alkalinity must exceed the total acidity) and the turbidity shall not exceed 100 Jackson candle units (JCU). The department may modify above requirements if special problems occur.

(2) The maximum total allowable increase to naturally occurring stream turbidity is 10 JCU except that 4 hours following a major precipitation event, the discharge shall not contain suspended sediments in excess of 500 JCU above normal and not over 100 JCU above normal 24 hours thereafter. All analyses are to be defined and performed according to the standard methods for the examination of water and wastewater, unless otherwise specified in writing by the department. If the above standards of this rule are in conflict with federal and/or other Montana state agencies the more stringent regulations will apply. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1820 WATER QUALITY: DRAINAGE (1) All surface water which might damage regraded slopes shall be intercepted on the uphill side of the slope or other mine site perimeters by diversion ditches and conveyed by stable channels or other means to natural or prepared watercourses outside the operation and it is determined by the department that such ditches and channels are unnecessary or would create a more serious pollution problem. Such conveyances shall be of sufficient size and grade to prevent overflow into the operations area. If the ditches are likely to carry surface water only intermittently, they shall be retopsoiled and revegetated with recommended grasses, forbs, and/or legumes. All constructed diversion ditches shall be included in the permit acreage and shown on the map.

(2) Water accumulating in the course of the operation shall meet the water quality specifications enumerated herein or shall be pumped or siphoned to a treatment or settling facility prior to discharge into a natural drainway. Under no circumstances shall water be discharged onto highly erodible soil banks.

(3) No surface drainage shall be discharged through or permitted to infiltrate into existing deep mine workings. Location of all known existing deep mines within the permit area and plans for remedial measures shall be included in the application for a permit.

(4) All drainage from the active construction area shall exit through impoundment or treatment facilities in accordance with (1) and (2) of this rule. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

Rules 17.24.1821 through 17.24.1823 reserved

17.24.1824 TOPSOILING (1) All suitable topsoiling materials, as approved by the department, shall be removed from the mine site location area before significant disturbance occurs. Removal shall precede each step of the construction operation. The operator shall indicate in the reclamation plan the equipment and method used in salvage and redistribution.

(2) Stockpiles of salvaged topsoiling material shall be located in an area where they will not be disturbed by ongoing construction operations and will not be lost to wind erosion and surface runoff. All unnecessary compaction and contamination of the stockpiles shall be eliminated. Once stockpiled it should not be rehandled until replaced on regraded disturbances. The department may require immediate planting of an annual and/or perennial crop on stockpiles for the purposes of stabilization. Proposed stockpile locations shall be indicated on the map submitted as part of an application for a permit.

(3) Stockpiled topsoiling materials shall be replaced on all areas to be seeded within a 90 day period prior to revegetative seeding or planting. Extreme care shall be exercised to guard against erosion during application and thereafter. In the case of abandoned roads, the roadbeds shall be ripped, disced, or otherwise conditioned before topsoil is replaced. The department may prescribe additional alternate conditioning methods for the reclamation of abandoned roadbeds.

(4) If necessary, redistributed topsoiling materials shall be reconditioned by discing, ripping, or other appropriate methods. Gypsum, lime, fertilizer, or other amendments may be added in accordance with ARM 17.24.701 through 17.24.703, and/or as stated in the approved reclamation plan.

(5) Regraded surfaces shall be left roughened in final contour grading to eliminate slippage zones that may develop between deposited topsoiling materials and heavy textured surfaces. The operator shall take all measures necessary to assure the stability of topsoil on graded slopes. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1825 PLANTING AND REVEGETATION (1) A suitable permanent diverse primarily native vegetative cover capable of meeting the criteria set forth in 82-4-233, MCA, shall be established on all areas of lands affected except traveled portions of railroad loops and roadways, areas of authorized water confinements, or areas where disturbance levels will preclude vegetation establishment. Areas shall be planted or seeded during the first seasonal opportunity following completion of grading topsoil redistribution and remedial soil treatments.

(2) An operator shall establish a permanent diverse vegetative cover of predominantly native species by drill

seeding or planting, by seedling transplants, by establishing sod plugs, and/or by other methods. All methods must have prior approval by the department.

(3) The operator shall utilize certified seed of named varieties that have successfully demonstrated regional long range viability. Locally collected seed and locally grown seedlings shall be utilized when available in sufficient quality and quantity.

(4) An operator shall plant seed of a pure and viable nature. Unless otherwise approved by the department, seed shall be at least 90% pure. Seeding rates shall reflect germination percentages.

(5) The operator shall consider soil, climate, and other relevant factors when planting and/or seeding to provide for the best seed germination and plant survival.

(6) All drill seeding shall be done on the contour. When grasses, shrubs and/or forbs are seeded as a mixture they maybe drill seeded in separate rows at intervals specified in the standard soil conservation service (SCS) planting guidelines. Such mixed seedings shall be done in this manner wherever necessary to avoid deleterious competition of different vegetal types or to avoid seed distribution problems due to different seed sizes.

(7) Soil amendments shall be used as necessary to supplement the soil and to aid in the establishment of a permanent vegetative cover as specified in the approved reclamation plan or as later deemed necessary by the department.

(8) An operator shall use any other means necessary to insure the establishment of a diverse and permanent vegetative cover, including but not limited to irrigation, and fencing or other protective measures.

(9) The department may require the seeding of annual grasses and/or legumes on such areas as it deems necessary.

(10) Mulch shall be immediately applied to all areas that do not have permanent or temporary cover established when, in the opinion of the department, the grade or length of any slope presents a likelihood of substantial erosion or substantial deposition of sediment into any waters of the state.

(11) The department will annually inspect seeded areas at the end of the growing season to determine species diversity, germination and seedling take. If the department determines that seedings are unsuccessful in terms of good germination and/or seedling take, immediate investigative action shall be taken by the operator at the request of the department to determine the cause so that alternatives can be employed to establish the desired permanent vegetative cover at the very next seasonal opportunity. The investigative report shall be submitted along with prescribed course of corrective action prior to the next growing season.



(12) If the area affected is to be primarily utilized by domestic stock, the department may require incorporation of a grazing system after vegetation establishment to gauge stand tolerance to grazing pressure. (History: 82-4-111, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)

17.24.1826 FORMS (1) Forms necessary for compliance with the Montana Strip Mine Siting Act will be available at the Department of Environmental Quality, PO Box 200901, Helena, MT 59601. (History: 82-4-112, MCA; IMP, 82-4-125, MCA; NEW, Eff. 4/4/75; TRANS, from DSL, 1996 MAR p. 2852.)